group of endonucleases selected from the group consisting of an a truncated stable truncated Uve1p identified by the amino acid sequence given in SEQ ID NO:4, wherein said endonuclease is purified, and a fusion protein comprising a stable truncated UvePl and a heterologous sequence, wherein said fusion protein is identified by the amino acid sequence given in SEQ ID NO:2.

22. (New) The method of claim 21, wherein said truncated Uve1p has the amino acid sequence as given in SEQ ID NO:4.

23. (New) The method of claim 21, wherein said fusion protein consists of the amino acid sequence given in SEQ ID NO:2.

24. (New) The method of claim 21 wherein the insertion deletion loop is of four or fewer nucleotides.

25. (New) A method for cleavage of a double-stranded DNA molecule characterized by a distorted structure, wherein said distorted structure results from an abasic site, mismatched nucleotide pairing, a platinum diadduct, an insertion deletion loop, alkylation of a nucleotide, the presence of a uracil residue resulting from deamination of a cytosine residue, said method comprising the step of contacting a DNA molecule characterized by a distorted structure with a broadly specific DNA damage endonuclease comprising an amino acid sequence selected from the group consisting of SEQ ID NO:36; SEQ ID NO:37; SEQ ID NO:38; and SEQ ID NO:39, under conditions allowing for enzymatic activity of said endonuclease.

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REMARKS

Claims 16-20 have been canceled without prejudice, and new claims 21-25, supported by the canceled claims, have been presented. New claim 21, which replaces as-filed claim 16, recites